

**PATENT APPLICATION**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In Re Patent Application of:

Inventor(s): John South Lewis III, et al.  
Filed: Herewith  
Serial No.: Unknown - CIP of 10/210,010  
Confirmation No.: Unknown  
Art Unit: Unknown - Art Unit of parent is 1765  
Examiner: Unknown - Examiner of parent is Robert M. Kunemund  
Docket Number: MCNC-SRT-548.01  
Title: Layered Photonic Crystals

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Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

**INFORMATION DISCLOSURE STATEMENT**

Sir:

The undersigned submits herewith patents, publications or other information (enclosed herewith and listed on the enclosed list of references form) of which he is aware, which he believes is relevant and may be material to the examination of this application and for which there may be a duty to disclose in accordance with 37 CFR §1.56. The order of listing of the references on the attached form and any appendix hereto is without regard for relative relevance to the present invention.

This Information Disclosure Statement is submitted:

☒ Under 37 CFR §1.97(b).

(Within three months of filing national application; or date of entry of international application; or before mailing date of first office action on the merits; whichever occurs last)

☐ Under 37 CFR §1.97(c).

☐ Below is a statement under 37 CFR §1.97(e), or

☐ An IDS submission fee under 37 CFR §1.17(p).

(After the CFR 1.97(b) time period, but before final action or notice of allowance, whichever occurs first. Either a statement under 37 CFR 1.97(e) or an IDS submission fee is required.)

☐ Under 37 CFR §1.97(d).

☐ Below is a statement under 37 CFR §1.97(e), and

☐ Applicant(s) hereby petitions under 37 CFR §1.97(d)(2) for consideration of this Information Disclosure Statement, and

☐ A petition fee set forth in 37 CFR §1.17(i) is paid as indicated below.

(Filed after final action or notice of allowance, whichever occurs first, but before payment of the issue fee)

The undersigned hereby certifies under 37 CFR §1.97(e) that:

- ☐ Each item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application, not more than three months prior to the filing of the statement, or
- ☐ No item of information contained in the Information Disclosure Statement -- was cited in a communication from a foreign patent office in a counterpart foreign application, and -- to the knowledge of the undersigned, after making reasonable inquiry, was known to an individual designated in 37 CFR §1.56 (c) more than three months prior to the filing of the Information Disclosure Statement.

A concise explanation of relevance of the items listed on the attached form:

- ☐ Additional information is provided in an appendix to this communication.
- ☐ Appears in the body of the application.
- ☐ Is given for non-English language listed item(s) [Required] and appears in an appendix to this communication.
- ☐ Is in the form of an English language copy of a Search Report (copy attached) from a foreign patent office, issued in a counterpart application which refers to the relevant portions of the references.
- ☒ Please see additional information in the Appendix to follow.

While the information and references disclosed in this Information Disclosure Statement may be "material" pursuant to 37 CFR §1.56, this statement does not constitute an admission that any patent, publication or other information referred to therein is "prior art" or "material" to this invention or any application for patent for this invention.

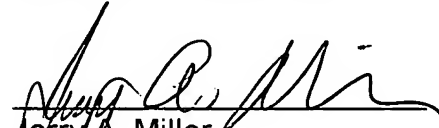
In accordance with 37 CFR §1.97, the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that other information that may be material as defined in 37 CFR §1.56 exists. It is submitted that the Information Disclosure Statement is in compliance with 37 CFR §1.97 and §1.98 and MPEP §609. The Examiner is requested to fully consider each of these references and acknowledge such consideration by appropriately initialing the attached form and returning a copy to the address below. In addition, the Examiner is requested to conduct a thorough independent search in order to bring the best references available forward in this application.

The fee required for this Information Disclosure Statement is calculated below:

Fee under 37 CFR §1.17(p)	(\$180)	\$
Fee under 37 CFR §1.17(i)	(\$130)	\$
TOTAL		\$ 0.00

- ☐ A check for the above fees is enclosed.
- ☐ Please the above fees to my credit card. See the enclosed credit card charge authorization form.
- ☒ The commissioner is hereby authorized to charge any additional fees which may be required for this submission, or credit any overpayment to my Deposit Account No. 50-1267.

Respectfully submitted,

  
Jerry A. Miller  
Registration No. 30,779

Dated: 12/19/03

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## APPENDIX

The references noted on the enclosed list represent search results submitted with the parent application, search results from the parent's corresponding PCT application, and search results from the U.S. Patent Office in the parent application.

Specifically regarding the Kim et al. reference, this reference was cited in the parent application, but no copy was provided in the first Office Action allowance of the parent application. But it is noted that in view of the date, this reference is clearly not prior art to the parent and is also clearly not prior art for claims supported by the original parent application which are being presented in the present application.

It is further noted that the inventor has diligently sought to obtain a copy of the Kim et al. reference through his company's (the assignee) technical librarian. The technical librarian was unable to obtain a copy of this reference, thus, none is available for submission in this IDS. However, in view of this document being cited in the prior application, it is believed readily to the Office from Examiner Kunemund. The undersigned has contacted Mr. Kunemund to request a copy of the document, but Mr. Kunemund was unable to readily retrieve the file. The undersigned will gladly submit a copy of the reference when and if he can obtain one. In view of these circumstances, it is respectfully requested that this reference be considered in prosecution of this CIP application even though the undersigned was unable to provide a copy of the reference with this IDS.

LIST OF REFERENCES CITED BY APPLICANT(S)	Application No.: Unknown	Sheet 1 of 1
	Docket No.: MCNC-SRC-458.01	Group: Unknown
	Filed: Herewith	Conf. No.: Unknown
	Applicant: John Lewis III, et al.	

U.S. PATENT DOCUMENTS					
Exam. Init.	Document Number	Issue/Pub. Date	Name	Class	Filing Date
	2002/0045030	4/18/2002	Ozin et al.		10/16/2001
	2002/068018	6/6/2002	Pepper et al.		12/6/2000
	6,287,765	9/11/2001	Cubicciotti		5/20/1998
	6,410,416	6/25/2002	Dodabalapur et al.		5/28/1999

FOREIGN PATENT DOCUMENTS					
Exam. Init.	Document Number	Date	Country	Class	Translation

OTHER DOCUMENTS / CITATIONS	
Exam. Init.	Document
	TechNote #205 - Covalent Coupling, Bangs Laboratories, Inc., Rev. #002, 8/31/99, pp 1-10.
	Zhou et al., "Three-Dimensional Photonic Band Gap Structure of a Polymer-Metal Composite", Applied Physics Letters, Vol. 76, no. 23, pp 3337-3339, June 2000.
	Sun et al., "Photonic Gaps in Reduced-Order Colloidal Particulate Assemblies", Jpn. J. Appl. Phys., Vol 39, pp L591-L594, 2000
	Y. Saado, et al., "Self-assembled Heterostructures Based on Magnetic Particles for Photonic Bandgap Applications", Optical Materials, Elsevier Science Publishers, B.V. Amsterdam, NL, Vol. 17, no. 1-2, June 2001 (2001-06), pages 1-6, XP004254779, ISSN: 0925-3467
	Velikov, et al., "Layer-by-Layer Growth of Binary Colloidal Crystals", Science, Vol 296, pp 106-109, 2002
	Kim et al., "DNA assisted 2D Photonic Crystal Fabrication", Polymeric Materials Science and Engineering, Vol 89, page 129, 2003 (See additional information in Appendix to IDS)

Examiner:	Date:
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